

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for indexing voice mail messages, comprising:
- receiving one or more voice mail messages from one or more callers;
- processing speech signals from each of the voice mail messages with one or more caller speaker models;
- determining the identity of each of the one or more callers in each of the one or more voice mail messages; ~~and~~
- AI tagging each of the voice mail messages with the respective identity of the caller for each respective voice mail message; and
- receiving a speaker label from a voice mail subscriber for a voice mail message tagged as unknown, wherein the speaker label is the identity of the speaker of the voice mail message.
2. (canceled)
3. (currently amended) The method of claim 1, wherein the speaker label provided by the ~~user~~ voice mail subscriber is used to create a storage folder for that specific speaker of the voice mail message.
4. (original) The method of claim 1, wherein the speaker models are created from one or more voice mail messages left by the same caller.

5. (original) The method of claim 1, wherein speaker models are created using acoustic features extracted from the voice mail message, the acoustic features extracted using speaker recognition techniques.

6. (original) The method of claim 1, further comprising:
tagging the voice mail message as unknown if no existing speaker model is found to match the voice mail message.

7. (original) The method of claim 6, further comprising:
receiving a speaker label from a user for the voice mail message tagged as unknown.

AI 8. (original) The method of claim 6, wherein the voice mail message tagged as unknown is used to adapt a previously created speaker model.

9. (original) The method of claim 1, wherein the step of determining the identity of the caller in each of the one or more voice mail messages includes the substep of:
using automatic number identification to assist in determining the caller's identity.

10. (original) The method of claim 1, wherein the step of determining the identity of each of the one or more callers includes the substep of:
using speech recognition techniques to extract caller identity information from the voice mail message.

11. (currently amended) A method for organizing a plurality of voice mail messages for one or more voice mail subscribers, comprising:
processing speech signals from each of the plurality of voice mail messages with one or more speaker models, wherein each of the one or more speaker models is created from speech

signals extracted from previous voice mail messages left by the same caller as identified by the voice mail subscriber;

determining the identity of each of the voice mail message speakers based on the comparison with the one or more speaker models; and
organizing the plurality of voice mail messages by speaker.

12. (original) The method of claim 11, further comprising the step of:
tagging a voice mail message as unknown if the comparison of processed speech signals with the speaker models does not pass a matching threshold.

AI 13. (canceled)

14. (original) The method of claim 11, wherein the step of determining the identity of each of the voice mail message speakers based on the comparison with the one or more speaker models further includes the step of:

determining, using automatic number identification, the telephone number of each speaker leaving a voice mail message.

15. (original) The method of claim 11, further comprising:
tagging a particular voice mail message as unknown if no existing speaker model is found to match the voice mail message.

16. (original) The method of claim 15, further comprising:
receiving a speaker label from the subscriber for a voice mail message where no match is found from the one or more speaker models.

17. (currently amended) A system for organizing one or more user's voice mail messages by speaker, comprising:

a voice mail server for creating one or more speaker models from speech signals extracted from a plurality of voice mail messages left by a same caller as identified by a voice mail subscriber;

the voice mail server further for determining the identity of a plurality of voice mail messages by processing each of the plurality of voice mail messages with the one or more speaker models, each of the speaker models identifying a specific caller; and

AI a storage medium for storing the plurality of voice mail messages, the plurality of voice mail messages organized by caller on the storage medium.

18. (original) The system of claim 17, wherein the voice mail server tags a voice mail message as unknown if the voice mail message does not match any of the existing speaker models.

19. (original) The system of claim 17, wherein the voice mail server also uses automatic number identification to assist in determining the identity of a specific caller.

20. (original) The system of claim 17, wherein the voice mail server uses speaker identification and verification techniques to create speaker models.
